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RÉPUBLIQUE FRANÇAISE

STRATEGY PAPER
Sanitation Sector Strategy

Adopted on 15 December 2008
By the Inter-ministerial Committee for International Cooperation and Development
ICICD

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In 2005, France defined an inter-ministerial strategy concerning the water sector in order to orient its official development assistance (ODA). This strategy underpins policy supporting the Millennium Development Goals (MDGs) pertaining to water and sanitation[1].
It comes at a time when it is increasingly necessary to anticipate and take account of the impacts of climate change on water resources. These impacts include water stress, drought, flooding; rising seasonal and geographical variations. The question of sanitation must also be considered in relation to the strong demographic growth typical of developing countries, particularly the concentration of populations in urban areas, which in turn leads to poorly- or under-controlled residential development and poorly- or under-regulated development of polluting economic activities. Sanitation is a local service that must be managed within the scope of existing institutional scenarios, in which decentralization is applied and enforced with varying levels of force and effectiveness.
Sanitation is one of the top priorities of France's water sector strategy: given the health-related, environmental and economic issues arising from the lack of sanitation, it is no longer conceivable to design a water project without sanitation. Actions must seek to improve facilities for households, particularly the poorest, but also for trade, industry and any other players whose activities pollute or threaten water resources.

1. Targeting and terminology

1.1. SOD target audience

This Strategic Orientation Document (SOD) on Sanitation aims to define a framework for cooperative action among French public institutions in the area of wastewater. It was established in collaboration with representatives from all French organizations involved in international cooperation, from local government and non-profits to the private sector and research organizations. It offers a shared framework for action.
This sector strategy will need to dovetail with the other existing cooperation strategies concerning the water sector and related areas, including integrated management of cross-border water resources, training in water-related and sanitation professions, water for sustainable agriculture, waste management and territorial governance and resource planning, all of which come under the umbrella of sustainable development and the fight to end poverty. In addition, it defines a sectoral framework for any Partnership Framework Documents (PFD) signed between France and partner countries.

This SOD is therefore both:

- A **reference document** defining a sectoral, strategic framework for actions by public institutions in the area of wastewater and excreta management, in which project owners and operators – be they French or Southern or international partners – are encouraged to include their water and sanitation programs and projects.
- A **communication document** intended for the general public, donors and authorities within beneficiary countries, setting out the principles that France wishes to promote and the objectives it has set to achieve a maximum impact on those who directly benefit from aid, the first of whom are populations lacking adequate access to sanitation.

[1] Sectoral strategy: Water and sanitation, CICID dated 18 May 2005: www.diplomatie.gouv.fr, *Aide publique au développement* section

1.2. Sanitation, a complex sector

This SOD focuses on:

- **The management of domestic wastewater (blackwater and excreta, greywater)**
- **The management of wastewater produced by industry and trade**

Managing **wastewater** produced by households in rural and urban residential areas and managing effluents generated by industries and trade both contribute to a single goal, but require different approaches and solutions.

Rainwater evacuation poses similar problems in terms of urban infrastructure and public health. However, because of its specific nature, this issue will only be addressed herein when it ties in with the types of wastewater management described above.

The issues, solutions, level of urgency and feasibility of actions differ depending on the areas being considered, and in particular based on:

➢ **Population density**: issues and priorities vary depending on whether densely populated urban areas or sparsely populated rural areas are being considered. ➢ **Sensitivity of affected areas**: groundwater, soil and biodiversity.	**Technical decision-making criteria:** Individual or communal sanitation
➢ **Level of socio-economic development**: the ability to invest in and recover service operating costs varies from one country and region to another and within the social categories of a given region.	**Financial decision-making criteria** (global study, search for funding): investments required to build communal systems or to develop individual solutions

The sanitation sector, whether it involves individual or communal solutions, always comprises three operational "segments"[2]:

- **Upstream segment**: access to sanitation facilities (latrines, manual-flush toilets, greywater cesspits, etc.) is either individual or via a communal system.
- **Intermediate segment**: on-site **evacuation/transport** of untreated waste (for communal sanitation: wastewater collection network / for individual sanitation: emptying of pits and evacuation of sludge is performed manually or by special vehicles).
- **Downstream segment**: **treatment**, **recycling and reuse** of wastewater and sludge, including extensive treatment (such as lagooning, filter beds, drying beds, etc.), or not (such as activated sludge), upon exiting the system or for excreta.

These three links complement the fundamental upstream pillar of **hygiene education**.

A vast array of technical solutions can therefore co-exist within a single region.

[2] Water Solidarity program / Municipal Development Partnership: "Sustainable management of waste and urban sanitation", 2004, financed by MAEE.

Sanitation based on housing type

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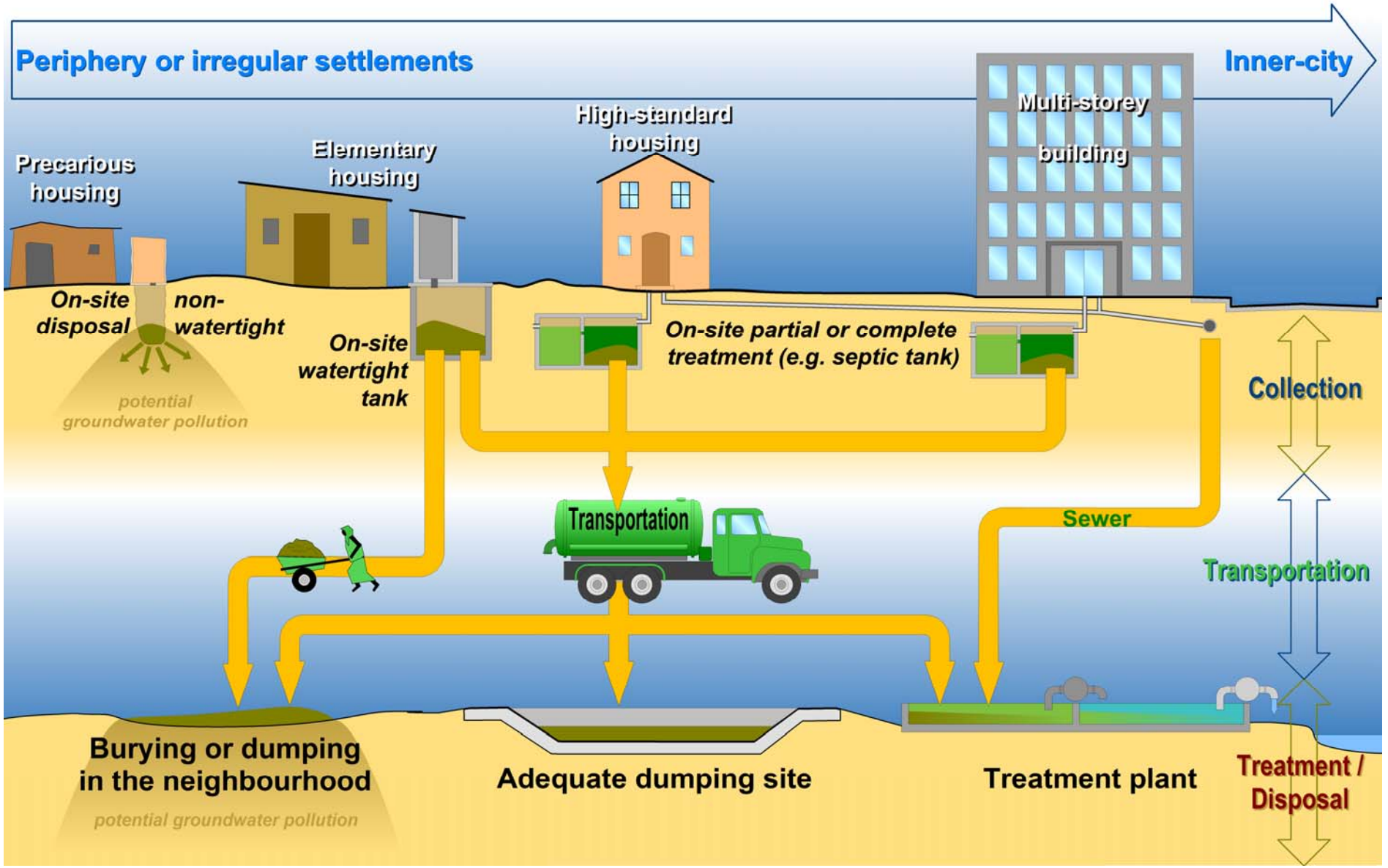


All progress in the sanitation sector must be backed by an **appropriate institutional framework and strong political will at the local and national levels.**

One noteworthy specificity of sanitation-related actions relates to the fact that, **from a public health perspective, sanitation is not only a question of having facilities but also of individual behaviors.**

In this document, the expression "**sanitation services**" refers to public policies and strategies aimed at providing access to all types of sanitation systems, whether communal or individual.

The **UN provides the following definitions** regarding access to sanitation[3]:

"improved sanitation facilities"	**"non-improved sanitation facilities"**
Flush toilets with evacuation to: A sewer system, septic tank or latrine pit Improved or ventilated latrine Latrine with slab Composting latrine ➔ Facilities that ensure privacy and prevent contact between the population and human waste.	Public or shared latrines Traditional latrine (drop hole) Hanging latrine (over a river or canal) Use of bucket or container emptied manually No facilities, open defecation

However, **for the French strategy, "basic sanitation"** has a more extensive definition, as it encompasses facilities shared among several households.

Basic sanitation encompasses a set of **adequate individual sanitation** facilities that meet the following criteria:

- For **blackwater and excreta**:
  - The **slab** is easy to use and clean, limits the risk of contact with excreta and nuisance factors (ventilation pipe to combat odors and flies) and offers user comfort.
  - The **shelter** ensures user privacy, thereby preserving dignity (door) while guaranteeing usability regardless of weather conditions (roof).
  - The **pit** must be sealed or dry to avoid the risk of contaminating underground water resources.
- For **greywater** (kitchen, washing, bathing): cesspit or pit.
- Presence of an **evacuation** system and a designated area for **emptying/treatment of waste.**

[3] OMS/UNICEF, Joint Monitoring Program, 2008, "Progress on drinking water and sanitation; special focus on sanitation"

2. Issues

2.1. "The deadly cost of inaction[4]"

➢ **2.5 billion human beings lack access to basic sanitation.** Every year, this situation causes epidemics and millions of avoidable deaths, particularly among children.
Illnesses due to insufficient sanitation in turn lead to school and work absenteeism, lowering academic levels and causing considerable economic and income loss at the national level. Access to proper sanitation must be achieved in order to guarantee human dignity, contribute to the development of southern countries and fight poverty.
African and Asian countries have the lowest sanitation access rates. Although the situation is improving in Asia, the problem remains very serious across Africa.
The **sanitation access rates** (% of the population) are as follows[5]:

	1990	**2004**	**Progression (%)**
World	49	59	+10
Developing countries	33	49	+16
Least developed countries	22	37	+15
Latin America & the Caribbean	67	78	+11
Arab countries	61	71	+10
Eastern Asia & Pacific	30	50	+20
Southern Asia	18	37	+19
Sub-Saharan Africa	32	37	+5

➢ **85% of human and industrial pollution is discharged with no purification**, either on land, thereby polluting natural resources, particularly groundwater and soil; or directly into rivers and coastal or marine environments. **This disposal often occurs upstream of water supply points** for human or animal consumption, thereby raising the cost of ensuring access to safe water for local populations. Concerning unitary systems, significant peaks in rainfall are difficult to absorb and wastewater/rainwater runoff goes directly into the environment without being treated. These types of impact could worsen with climate change.

2.2. Inhibitive factors

While undeniable progress has been made to improve access to drinking water, the sanitation sector is very far behind in comparison. This situation can be explained by several factors relating to the **inaction of players in this sector**:

1. **Requests** by beneficiaries – both households and companies – for sanitation services are not properly recognized and sometimes go unexpressed for lack of adequate analysis, leading to insufficient awareness of the benefits of improved sanitation access.
2. Lack of **political will**: in most countries, sanitation is not perceived as a priority and does not benefit from an adequate institutional or organizational framework. As a result, responsibility is diluted among the relevant ministerial departments and local and regional authorities.
3. Absence or non-compliance with **regulations** concerning disposal into the environment and insufficient awareness of the environmental impact and cost of non-sanitation (negative side effects).

[4] This was the name of an e-conference organized in November 2007 by the Africa working group of the EU Water Initiative, in preparation for the 2008 International Year of Sanitation. See www.pseau.org/EUWI/AWG/e-conference-sanitation/Accueil.htm

[5] UNDP, Human Development Report 2006 – figures are based on the JMP definition of basic sanitation.

4. User service **offers**, whether they entail technical or management-oriented solutions, are too often inappropriate, coupled with a lack of knowledge regarding the various **technical and organizational alternatives** that could be implemented based on specific contexts.
5. **Insufficient local technical capabilities** for meeting the different types of requests and ensuring optimal facility performance.
6. Difficulties encountered in making up for **lost time**, using only national and local resources, in the provision of sanitation to current urban populations, especially given the unprecedented urban growth occurring in many developing countries.
7. **Inaction and lack of international funding** in this sector, in particular for communal systems, which require significant investments.
8. Absence of suitable mechanisms to **recover operating costs**, given users' limited ability to pay for services provided.

Faced with these challenges, the international community made a serious commitment during the 2002 World Summit on Sustainable Development in Johannesburg. Target no. 10 of the 7th Millennium Development Goal[6] was complemented by the following objective: "**Halve, by 2015, the proportion of the population without sustainable access to basic sanitation services.**" For the first time, this sector was being considered in its own right, and a goal was set just as for drinking water.

In response to recommendations from the UN Secretary-General's Advisory Board on Water and Sanitation and to initiatives by France, Germany and Japan, in 2006 the UN General Assembly also decided to make **2008 the International Year of Sanitation**.

2.3. Improved sanitation brings significant benefits

Yet promoting access to sanitation can be measured in terms of benefits, including economic: **spending on sanitation means investing for development**.

2.3.1. Health and social benefits

➢ **Water supply and sanitation** must go hand in hand to bring health benefits: to achieve greater impact, the water supply must be combined with sanitation facilities, but also with behavioral changes to ensure better hygiene. A study by WHO[7] estimates that, out of 9.7 million children who die before the age of five, 1.6 million infant deaths are caused by diarrhea. It also estimates that 88% of these deaths are due to poor sanitation and hygiene combined with contaminated water intake. Hand washing stations with soap and wide scale learning campaigns have proved their effectiveness: according to a scientific study[8], hand washing has reduced the incidence of pneumonia in children under five by 50%.

Adequate treatment reduces health-related risks (parasitological, bacteriological, etc.) caused by the irrigation of crops downstream from wastewater collection networks.

➢ The **installation of suitable sanitation facilities helps improve school attendance**, in particular among girls when there are separate latrines for both genders. For example, in Orangi (Pakistan), half of the cases of drop-out at the end of primary school among girls can be attributed to the fact that sanitation facilities are not gender-separate and that there is no access to water[9].

[6] Initially defined by the United Nations General Assembly (UNGA) at the Millennium Summit (2000).

[7] OMS, 2008, "Safer water, better health: costs, benefits and sustainability of interventions to protect and promote health".

[8] Luby S., Agboatwalla M. et al., 2005, "Effect of hand-washing on child health: a randomised trial", The Lancet, 366, 225-233.

[9] Water Solidarity program / Municipal Development Partnership, 2006, "*La prise en compte du genre dans les projets d'adduction d'eau potable en milieux rural et semi-urbain ; Guide méthodologique*".

➢ **Sanitation is also a question of human dignity.** Open defecation and unhygienic practices are often considered to be degrading and disgraceful. Giving people access to adequate sanitation restores their self-esteem and esteem for others. In particular, women no longer need to hide to defecate, and their right to privacy and physical safety is restored. Acquiring a system for evacuating excreta frequently helps ease neighborhood tension caused by odors generated by those with no evacuation system.

2.3.2. Environmental benefits

➢ **Adequate sanitation facilities** help reduce the risk of groundwater and river **pollution**, thereby helping preserve natural resources, including fishing resources, and soil.

➢ In contrast, **the absence or inappropriateness of facilities** could:

- **Pollute resources (both aquifer and surface)** that could be mobilized for water supply or other uses.
- **Increase the cost of producing drinking water**, as the cost of treating and purifying collected water is rising.
- **Harm the environment, particularly the salubrity of the urban environment** in densely populated areas, and cause medium-term soil contamination, to the detriment of local plant and animal species.

2.3.3. Economic benefits

➢ **Investing in sanitation reduces public spending on health**

According to a study by WHO[10], over 7 billion dollars are spent worldwide every year due to the four main waterborne diseases, while in theory, the amount needed to halve the number of persons without access to drinking water and proper sanitation would be 11 billion dollars annually. Over 60% of investments made toward sanitation would therefore be amortized by a decrease in public health costs.

➢ **Investing in sanitation generates economic growth**

In Madagascar, it is estimated that loss of work caused by illness from poor sanitation amounts to over 5 million productive days per year. In other words, an annual loss of production totaling just under 80 million Euros[11], or over 2% of the country's GNP.

During the first twelve weeks of the cholera epidemic that struck Peru in 1992, the shortfall resulting from decreased tourism-related and agricultural export revenues was three times greater than the amount invested in water and sanitation by Peru in the 1980s (one billion dollars).

Collecting and treating wastewater and excreta helps develop the reuse in agriculture of water resources utilized for urban needs. It also helps develop agriculture-based recycling of fertilizer produced through treatment processes.

➢ **Investing in sanitation is a business argument in today's international context**

A desire to increase free trade agreements with developed countries motivated Chile to invest in the treatment of wastewater. As of 2005, over 70% of Santiago's wastewater was treated, compared against 3% in 2001[12]. Along the Mediterranean, demographic growth combined with a forecasted increase in tourism means projects to control pollution caused by domestic and industrial wastewater must necessarily be carried out alongside economic development projects.

[10] WHO, 2004, "*Amélioration de l'approvisionnement en eau et de l'assainissement dans le monde : coûts et avantages*".

[11] WaterAid, 2002, "*Assainissement, le défi*".

[12] Experians, 2005, "*Monter un projet d'assainissement dans les quartiers urbains pauvres de pays en développement : une autre approche*".

3. Strategic orientations

3.1. Three aims: health, the environment and economic development

Regardless of the type of sanitation chosen, the objectives are to:

- **Protect public health:** improve health conditions for populations, within their homes and in schools, health centers and other public places.
- **Preserve the environment:** avoid harming the surroundings and natural environment of populations by properly treating all wastewater prior to its disposal.
- **Contribute to economic development**: strengthen skills, reinforce local markets; highlight the comparative advantages of an enhanced region.

Without sanitation, there is no development, much less sustainable development.

3.2. One goal: sanitation for all

The fundamental objective of French involvement in wastewater management is to **improve beneficiaries' (households and businesses) access to sustainable sanitation**, by supporting governance in this sector and the development of infrastructures, facilities and services adapted to needs within the specific context of each region concerned.

To meet this goal, French involvement in sanitation must comply with a certain number of principles (which are explained in the areas for action):

- On the international scene, through **explanatory and lobbying actions** aimed at persuading donors and beneficiary countries of the need to act and adopt an approach that is compatible with the complexity of the sanitation sector.
- In the **implementation of its official assistance**, so that the projects and programs supported may be as effective as possible, and so the involvement of the various players may be more coherent in both the sanitation and drinking water sectors and, more generally, well integrated within the regions concerned and in line with existing domestic policies.

4. Seven areas for action

4.1. Make sanitation a priority for political decision-makers and donors

The combined action of French governmental and non-governmental players, each at their own level and using their own resources (diplomacy, communication, advocacy, etc.) and through the appropriate channels, must contribute to:

- **Communicating about the significant economic benefits** to be gained by improved sanitation facilities, from a health, environmental and economic standpoint.
- **Promoting a better understanding of sanitation**, with a specific approach for each link, in order to facilitate the organization and funding of different actions (targets, market segments, technical aspects of project, costs, and so on).

While many one-off actions have been conducted to improve sanitation, they are rarely part of a "bigger picture". These actions therefore have a limited impact and do not allow for the development of appropriate funding strategies.

These messages must target France's international **donor** partners and French political **decision-makers**, as well as those in partner countries, at the central and local levels, through political representatives responsible for developing and managing sanitation services.

4.2. Build sanitation projects based on beneficiaries' requests

4.2.1. An oft-overlooked pre-requisite: know beneficiaries' requests

Depending on the project type, the request analysis stage is often reduced to a simple estimate of needs based on usage ratios that rarely take account of local contexts.
And yet, to be realistic and sustainable, all water and sanitation projects must be rooted in a serious "**request analysis**[13]" based, if possible, on benchmark socio-economic studies that describe, for each relevant segment of the population (age, gender, income, etc.), the following:

- Current practices in hygiene and sanitation
- Household satisfaction levels with current facilities
- Factors of motivation to change these practices
- Requested improvements

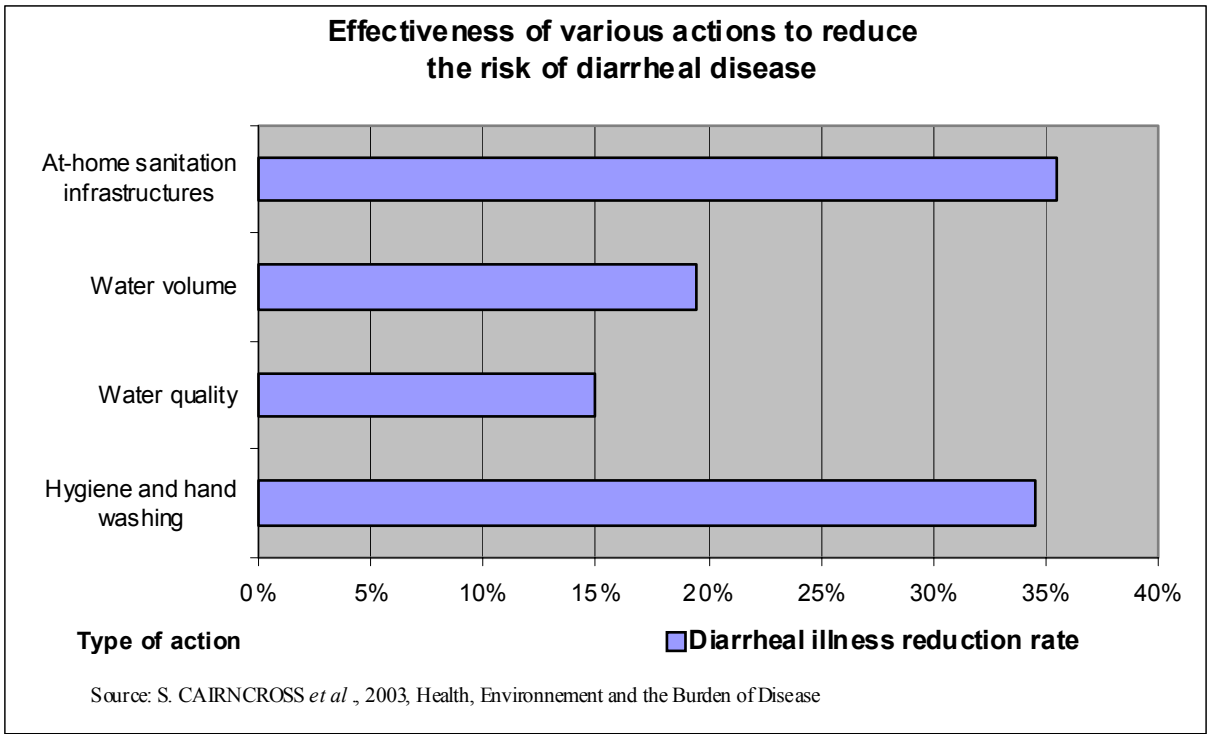
The goal is to enable beneficiaries to express their needs, which are often disregarded by local authorities, to coherently reformulate them within the local socio-economic context, and to gather the data necessary to determine the appropriate support programs during project implementation.

A "request" for a sanitation system is not usually formulated as such by households, who do not always correlate their discomfort (diarrheal illnesses, etc.) with its source (lack of sanitation or hygiene). Actions to **promote sanitation** are therefore often necessary.

4.2.2. Make the promotion of sanitation and hygiene an essential component of drinking water and sanitation projects and programs

When sanitation system users adopt improved hygienic behavior, the health-related benefits resulting from the building of sanitation infrastructures rise sharply.

[13] A. Morel à l'Huissier, CEREVE, 2003, "*Gestion domestique des eaux usées et des excreta : étude des pratiques et comportements, des fonctions de demande, de leur mesure en situation contingente et de leur opérationnalisation"*, Water Solidarity program / Municipal Development Partnership, "*Sustainable management of waste and urban sanitation*"



Source: S. CAIRNCROSS *et al* ., 2003, Health, Environnement and the Burden of Disease

Actions to **promote hygiene** help build beneficiaries' awareness of the health-related and environmental risks caused by inadequate sanitation. This is why hygiene education, including a component on water usage and storage practices, is an element that must be:

- Included in all projects designed to provide access to water and sanitation.
- Promoted within schools, public places (churches, health centers, train stations, markets, stadiums, etc.) and businesses of all sizes.
- Backed by the development of appropriate "demonstration" measures (for instance, water supply points or reservoirs enabling people to wash their hands after using the latrine).

It is also vital to conduct actions promoting **sanitation systems** and "social marketing" actions. Such initiatives, in addition to informing about the respective advantages of the different systems (comfort, maintenance, cost, etc.), also include incentives (e.g. partial subsidies for latrines or cesspits).

Existing local networks (e.g. associations, women's' committees) can participate in these promotional actions (promotion of hygiene, social marketing), which will be based on factors motivating households to change certain practices (cleanliness, neighborhood relations, comfort, shame, fear of disease, etc.).

4.3. Build or reinforce a suitable sectoral framework for sanitation

4.3.1. Support the creation of national strategies and policies clarifying the distribution of responsibilities among players

Considering the challenges raised by sanitation, each country should have a specific sectoral policy on this issue, capable of offering:

- A **steering body for this sector**: designated at the national level, this entity is most frequently an inter-ministerial body. Its function is to ensure progress in sanitation at the national level, and it has the necessary means to implement policy.
- **Clear distribution of responsibilities for each player involved**.

- **Guidelines to conduct actions**: based on a clear understanding of the issues and difficulties encountered by this sector, sanitation policy must set improvement objectives for each sub-sector or link, define the most appropriate and effective methods of intervention and determine the associated priorities. In particular, these guidelines must define the framework of local responsibilities and the practical details regarding funding. They must also improve the cohesiveness of actions conducted by partners in development, in compliance with the Paris declaration on the effectiveness of development assistance (ownership, harmonization, alignment, results and mutual accountability).
- **Figures on the resources necessary** to implement policy: based on the improvement objectives determined, national policy must propose a realistic, costed action plan. This investment framework must be stable and explicit for the players concerned.
- A **system for measuring progress**: to demonstrate the progress achieved in policy implementation, the policy must feature a system for monitoring and assessment, based on pragmatic indicators (service access rate, quality of discharges into the environment, etc.).

These sanitation policies and strategies will need to dovetail with: Integrated Water Resource Management (IWRM) policies; urban planning, in particular for rainfall management; funding strategies potentially based on the "polluter-pays" principle; incentive-based and compulsory mechanisms (regulatory police); as well as any other existing legal instrument.

4.3.2. Support the development of local strategies

Local public authorities in charge of sanitation are frequently responsible for locally implementing the orientations defined in national policies and strategies. To do so, they must first **define a local strategy** to sustainably improve sanitation services. This process, which must involve all sector players, makes it possible to respond to the issues identified in the preliminary diagnosis stage. The strategy developed forms a framework for action, setting out the role of each player and the synergies to be implemented. It improves **complementarity between local and outside efforts**, notably financial efforts.

Cooperation at the local level must help local public authorities comply with their obligation to provide sanitation services. Support will be provided to them in the form of expertise and training, enabling them to define their local strategy in collaboration with all stakeholders and ensure access to sustainable sanitation services for all.

4.4. Build infrastructure and facilities that meet users' demand

In order to meet the intervention strategy's main goal and promote the development of sanitation services that are at once technically and environmentally **sustainable**, **fair** and **accessible** to all, it is important to support **the building of infrastructure**, by differentiating interventions and setting priorities based on target requests, costs and expected impacts.

4.4.1. Diversify technical solutions

It is necessary to consider a range of technical solutions, **adapted to each context and each link in the sanitation sector**, from improved individual systems (including simple, low-cost solutions; see definition of "improved" in section 1.2) to conventional communal systems, and from collection to treatment. This entails developing:

- **Upstream**: material for **collecting** domestic wastewater and excreta.
- **Intermediary**: equipment for **transporting** effluents and excreta to treatment facilities.
- **Downstream**: equipment for **treating** and recycling wastewater and related products (excreta and sludge), provided there is a demand for the end products.

Readers are reminded that conventional systems (sewer systems and secondary or tertiary treatment), which are arguably the best solutions in terms of quality standards, are ill-suited to very low density populations and low per capita water consumption levels. In many countries, such systems will only be developed in the long term, for economic, financial and even cultural reasons.

The choice of any given technical solution is the result of a **multi-criteria analysis** that takes account of:

- Beyond the **physical environment**, beneficiaries' requests and their **ability to pay**, so as to ensure that service operating costs do not exceed the financial resources available to cover said costs.
- **Ability of local players** to operate sanitation services, in particular local government and private companies.
- **Availability of materials and parts** (ability to develop, operate and maintain systems).

4.4.2. Support the development or improvement of individual or semi-individual sanitation infrastructures for households

In developing countries, particularly in Africa, **sewer systems** are only available in a few areas of the largest cities. Improved individual sanitation on land plots is the best alternative to: being connected to a sanitation system, which remains financially unfeasible in the near future; at-home facilities, which fail to meet health and environmental standards; open defecation, which degrades human dignity and poses a threat to physical safety and public health, at least in an urban setting.
For the past several years, development of a new **semi-individual sanitation option, known as "condominial"** sanitation, has been widespread in Latin America, but more "hushed" in Africa. This option, which meets the needs of many densely populated residential zones, should be more closely considered.
Depending on local factors, particularly building density, soil type, groundwater depth, availability of surface water resources and the level and quality of available materials, actions should either aim at extending and improving individual domestic sanitation infrastructures, both for wastewater (cesspits) and excreta (latrines), or at developing semi-individual sanitation options.

4.4.3. Support the development of rainwater collection and evacuation systems

The poorest populations are also the most threatened in the floodplains where they live, and the most affected by problems caused by the **lack or inadequacy of drainage systems**. In rainy periods, and especially during heavy rainfall, garbage and other debris are dispersed, increasing the risk of contamination of stagnant water in public places and residential areas, and the risk of pollution of surface and groundwater supplies.
Improving rainwater collection and evacuation systems also contributes to **protecting resources and the natural environment**, and could be integrated into urban planning or sanitation projects.

4.4.4. Support the development of sanitation in public places serving a social purpose

Special consideration should be given to public establishments that serve a social purpose. Priority must be given to **schools, health centers, dispensaries and hospitals**, as they host awareness and learning initiatives that lead to better practices in terms of hygiene. In schools in particular, the presence of clean latrines that are separate for girls and boys is a pre-requisite, proven by experience in many countries, for increased, more regular school attendance among girls.
Other establishments and public places, such as **markets, train stations or religious or athletic centers**, also deserve special attention, as they attract large crowds and therefore require sufficient quantities of reliable facilities.

4.4.5. Encourage players in trade and industry to invest in pre-treating their waste

In addition to the actions targeting households and communities, it is important to build awareness among trade and industry players about the environmental impact of their activities. These awareness-building actions should include support measures to encourage professionals to deploy **pollution control systems before discharging their wastewater into the environment or communal systems**.
These measures presuppose that the regulatory framework (disposal standards, etc.) be adapted and that financial tools based on incentive and/or penalty, such as the polluter-pays principle, be implemented.

4.5. Reinforce the capacities of local project owners and support the emergence of a local market to develop offerings and maintain current facilities

Many developing countries have begun to decentralize competencies and responsibilities to sub-national authorities. New decentralization policies and the system of "territorial collectivities" (local authorities, regional authorities, etc.) provide an opportunity for the development and ownership of sanitation services at the local level. However, the human capacities and resources available to territorial collectivities are sometimes insufficient to fulfill these new responsibilities.

4.5.1. Reinforce local capacities of project owners and local players for the development and management of sanitation services

France strongly believes that a public service better meets evolving needs when it is planned and managed locally and in line with the right to sanitation. We therefore advocate the **local management of sanitation services**.
Delegating new responsibilities at the local level and organizing the sector from an institutional and technical standpoint require the provision of specific support to local authorities and their technical services, to deconcentrated national services and to the local private sector. This support should seek to reinforce these players' ability to organize, fund, operate and ensure the maintenance of sanitation services, as well as their ability to make diagnoses, define priorities, and choose sanitation systems in sync with evolving living modes, facilities and economic activities.
The capacities to be reinforced concern:

- Definition of local sanitation strategies

- Implementation of said strategies (mobilize players, award contracts, etc.)
- Management of services
- Quality control of services provided

This support shall be provided in the form of assistance to existing organizations providing **initial training** for engineers and technicians, the sector's future professionals, and to organizations specializing in **on-the-job training for professionals**. The targets are:

- Leaders of national and deconcentrated administrations, within the departments responsible for sanitation, health, education and so on.
- Local community leaders
- Local elected officials
- National and local sanitation service operators
- National supporting players (consultants, research and design firms, NGOs, etc.)

The goal is to assist training centers to more effectively factor sanitation players' new needs into their curriculums, especially those needs born of decentralization. Training courses must cover managerial, technical, financial and organizational aspects, and aim **at reinforcing, increasing and improving the performance of sanitation services**.

Reinforcing local capacities also includes supporting the development of **tools** – **handbooks and methodology** – to assist in the decision-making and action of local project owners and all other players involved in this sector.

Along these lines, **decentralized cooperation** is a valuable tool that enables the sharing of good practices and North-South and South-South cooperation.

4.5.2. Support the development and structuring of local private operators for the development and maintenance of sanitation services

The sanitation sector involves many different operators of varying size. It is a potential source of income for a large number of individuals and creates a veritable economic dynamic. Supporting local capacities must therefore also concern the **professionalization of local entrepreneurs** and the development of local markets capable of meeting **increasing demand from households and local government**. This type of involvement means reinforcing:

- Trades (masonry, well-digging, etc.) and small industries which manufacture and sell latrine slabs and other appropriate material.
- Their professionalization and ability to reply to invitations to tender, fix rates for their services and sign contracts with local authorities for maintenance services.

4.6. Set up various sustainable funding mechanisms to ensure sector's smooth running

Regardless of the link being considered, **funding mechanisms** are needed **to build, operate and regenerate** sustainable individual and communal sanitation systems.

It is essential to have **sustainable funding mechanisms** capable of generating **sufficient funds** to operate the sanitation sector. Supporting the creation and implementation of such mechanisms is a major challenge for the sector's development and longevity. From subsidies to sovereign lending, many instruments are available to fund the sanitation sector through development partners such as bilateral or multilateral agencies, local government or other donors.

4.6.1. Promote diversity of financial instruments available for funding and investment

Ensuring the diversity of financial aid instruments offers flexibility that can be adapted to each context. This diversity is likely to produce a **"leverage effect" on other potential resources** at the local, national and international levels, in partnership with the players of decentralized and non-governmental cooperation.
France's involvement in the sanitation sector shall aim to use this leverage effect, notably by promoting the **financial contribution** of local authorities and households, in particular to fund individual sanitation infrastructures.

- **French aid** can take on a variety of forms, based on the types of **investments** required:
  - Communal systems, which require considerable but unprofitable investments, call for a large percentage of **subsidies**. The French Development Agency, along with foundations, must give priority to the **heaviest investments** that cannot be made using local financial resources alone. Nevertheless, they mustn't overlook hygiene education, reinforcement of players' capacities and institutional support, for which other funding can be mobilized.
  - The mobilization of local government, water agencies and French water and sanitation syndicates (in particular through the Oudin-Santini law): in particular for the intermediate and downstream links, in addition to direct investments.

- The total or partial **regeneration** of communal systems to compensate for progressive deterioration can be treated as a new investment, enabling the associated financial mechanisms to be applicable or covered in the cost of service when budgetary provisions are spread over the system's lifecycle.

4.6.2. Systematize full cost recovery for sanitation services

It is vital to ensure **full sanitation service cost recovery** to guarantee service sustainability. The sanitation projects implemented must make sure this objective is taken into account. Just like for investments, it is necessary to establish diagnoses in order to identify all costs relating to operations and define the appropriate solutions. The costs resulting from ineffective management by the professionals concerned can sometimes increase operating costs and have to be recovered.

Recovery can be ensured in different ways, some of which are complementary of each other:

- **Direct payment** for sanitation services by the user – can be a fee added to drinking water bill (this is the system used in Burkina Faso)
- Local or national **taxation**
- National and/or local **equalization mechanisms** or **cross-subsidization** between services

These strategic choices are handled by local/national authorities, who include them in their documents on sectoral strategy/policy.

4.7. Improve knowledge by assessing, leveraging and diffusing it

Action by French players in the sanitation sector must fuel scientific knowledge and debate, both in France and abroad. These contributions play a key role in meeting our partners' expectations with regard to the various challenges – in terms of projects, research and

expertise – linked to sanitation (including domestic wastewater and excreta, industrial effluents, rainwater and solid waste).

4.7.1. Support research and experimentation

Sanitation has never been an obvious topic among researchers, nor a theme around which a research team or association of research centers have rallied. The research- and action-based program conducted between 2000 and 2004 on "**The sustainable management of waste and sanitation**" (*La gestion durable des déchets et de l'assainissement*), funded by the French Ministry of Foreign and European Affairs and coordinated by the Water Solidarity program / Municipal Development Partnership[14], did, however, mobilize a considerable number of French researchers, sometimes with prompting from Southern NGOs or researchers. This program led to considerable output on diverse questions (see References). **Research needs to be stimulated** in this domain, which is both complex and scattered among: the disciplines; the thematic constraints relating to the evolving international community and donors; and sanitation's absence of visibility, and therefore of demand from municipalities and other levels of sanitation-related decision-making and implementation.

This is why it is important to prompt the emergence of new questions and to:

- Support **research and experimentation** initiatives aimed at understanding the constraints and opportunities that result from the development of sanitation services, including their institutional, political, economic, financial, technical, managerial, health-related and behavioral aspects. These initiatives can be based on technological innovations or new developments in the field.
- Promote **initiatives involving Northern and Southern partners**, beyond mere research circles, and encourage the sharing of practices and opportunities to compare institutional frameworks and technologies that vary based on soil, climate, etc. Current practices must be made public and the limits of experimentation underway questioned before deciding where and how they can be replicated.
- Maintain **intelligence activities and follow political and scientific progress** in related areas in order to identify the shortfalls of existing systems and to seize opportunities to propose new research topics. The question of rainfall alone, for instance, should be studied, and specific areas for action in this field should be determined, in relation to those defined in this document.

4.7.2. Systematize action assessment and experience leveraging

Improving knowledge in order to better meet expectations also means leveraging projects implemented or supported by the different channels of French cooperation. Projects can be leveraged in several ways:

- **Systematize the assessment of actions performed**, and ensure the necessary funding, in the form of independent external assessments and/or internal evaluation documents, depending on project size, type and owners.
- **Contribute to intellectual output and facilitate access to information**, from submitting articles to scientific periodicals to building databases and case descriptions on Internet portals, etc.
- Utilize research results to develop **tools and manuals to be used by the different partner categories**: request analysis manual for operators as well as donors and prime contractors, who need to know how to interpret the results of actions performed; **project set-up manual**, for local French authorities who wish to develop partnerships with their

[14] The documents produced and the program summary are available at www.pseau.org

Southern counterparts; **decision-making** manual for Southern authorities in charge of developing this sector within their scope of skills and of making technical choices and decisions relating to costs, etc.

5. Implementing Sanitation strategy

5.1. Monitoring implementation

France is firmly committed to supporting the sanitation sector and promoting it as a development issue, in which financial and human resources must be invested. In order to measure the impact of French intervention and improve its actions based on the needs of beneficiary countries and populations, France shall acquire **tools** and annually publish the results achieved.

The French Development Agency (AFD) already measures its project **results** in terms of beneficiaries and facilities built, and has developed a tool to monitor the effectiveness of its operations based on project budget distribution among the various MDG targets. The **indicators** tracked[15] for sanitation are: the number of persons who gain access to sanitation (1.1 million persons between 2001 and 2005, the goal being 600,000/year as of 2009) and the number of persons for whom sanitation services were improved (3.5 million between 2001 and 2005, the goal being 2 million/year as of 2009). AFD also measures the treatment capacity funded[16]: between 2001 and 2005, efforts focused on purifying an amount of wastewater equivalent to the consumption of 1.6 million people. Ex-post evaluations of impact measurements need to be reinforced.

The French Ministry of Foreign and European Affairs (MAEE) is responsible for providing the French Inter-ministerial Committee for International Co-operation and Development (CICID) with annual **figures** on efforts made in the seven priority areas. It records all new commitments announced by the various ODA contributors.
Up to and including 2007, these figures did not distinguish between drinking water and sanitation. Therefore, there is no specific measure of the percentage of French commitments allocated to sanitation[17]. Only AFD was able to determine its commitments to sanitation, which totaled an average of 30% of all its water-related commitments between 2001and 2005. AFD was also able to set an objective to balance out the figures in favor of sanitation. Changes in the methodology used to determine these figures will be based on changes in the OECD Development Assistance Committee (DAC) reporting system, which could adopt codification allowing aid specific to sanitation and hygiene to be differentiated.

5.2. French players committed to ODA in the wastewater management sector

The diversity of French players and the actions they carry out in the field embody vast expertise not only about the service's technical, organizational and management issues and supporting sectoral reforms and research, but also with regard to solidarity issues.

[15] AFD, 2007, Water Sector Intervention Framework (2007-2009)

[16] This means "annually financing wastewater treatment for a number of inhabitants at least equal to the number of persons who gain access to drinking water."

[17] This distinct ODA measurement for sanitation is not possible in the OECD DAC figures either, which combine drinking water and sanitation projects under one heading.

5.2.1. Public administrations

In 2004, French cooperation established an **Inter-ministerial Committee for International Co-operation and Development** (CICID), which adopts the decisions and strategic documents on the orientations of French ODA twice a year.

- The mission of the **French Ministry of Foreign and European Affairs** (MAEE, www.diplomatie.gouv.fr) is to prepare intervention strategies and steer the implementation of France's "water and sanitation" strategy. To do so, it coordinates all French players by providing dedicated services (support to local government, to research for development, etc.) and participating in different national, European and international bodies.

- The **French Ministry of the Economy, Industry and Employment** (MEIE, www.minefe.gouv.fr) funds sanitation infrastructure projects through loans (RPE-Emerging Country Reserve Fund) and grants (FASEP - Private Sector Aid Fund; and the African Development Bank's rural initiative for water and sanitation in Africa).
- The **French Ministry of Ecology and Sustainable Development** (MEEDDAT, www.ecologie.gouv.fr/developpement-durable) coordinates international actions carried out collectively by French water agencies and participates in an array of international initiatives related to environmental protection and sanitation education.

5.2.2. French Development Agency - AFD

Since development cooperation was reformed in 2004, the French Development Agency has been the key operator behind French official development assistance. In this role, it developed an operational intervention strategy[18] that was validated by the relevant ministries (MAEE and MEIE).
Compensating for delayed progress in the sanitation sub-sector is an important aspect of this strategy. Focus must be placed on catching up in two areas: 1) hygiene training and access to individual sanitation facilities, and 2) wastewater collection, possibly including wastewater and excreta purification systems, to be implemented as soon as sectoral policies have been defined. Whether individual or communal sanitation facilities are chosen necessarily depends on the local context, and this choice must be scalable. Making up for lost time in sanitation will be made possible in particular thanks to the range of **AFD's financial instruments and their complementarity, with a view to increasing the effectiveness of the different types of intervention** (www.afd.fr).

5.2.3. International solidarity organizations

ONGs are extremely diverse in their mandates, areas for intervention and their actions and knowledge in the field. Whether specializing in water, health or the environment, certain ONGs operate chiefly in the field, while others are organized in information or advocacy networks. Some specialize in development, others in emergency interventions. ONGs[19] embody a considerable amount of expertise concerning **social mobilization** issues, assistance with **structuring local authorities** and reinforcing competencies, and on **solidarity-related issues**. Their role in cooperation benefitting the sanitation sector needs to be reinforced, in order to work more closely with local players.

[18] 2009 AFD, 2007, Water Sector Intervention Framework (2007-2009)

[19] The private French foundations involved in this sector are still not well-developed or well-known.

5.2.4. Local players and decentralized cooperation

French collectivities and local authorities (towns, intercommunal consortia, intercommunal and interdepartmental syndicates, departments, regions) along with the national water agencies, possess recognized know-how in **governance and management of local public sanitation services**. Many decentralized cooperative initiatives with Southern partners have been implemented, some of which are structured into networks to enable skill and resource sharing and to increase the effectiveness of interventions[20].
The **Oudin-Santini law** voted on February 9, 2005, authorizes these entities to allocate up to 1% of their water budgets to fund international actions. This offers an opportunity to find co-funding, and most of all to develop collaborative technical and institutional support programs and exchange-based programs with their partners. Out of an estimated financial potential of 120 million euros, approximately 25 million euros have been raised since 2005, including over 10 million in 2007 alone, for all actions in the water sector (drinking water, sanitation and resource management).

5.2.5. Private players

A large number of **French companies** contribute to improving sanitation services – including collection networks, treatment and wastewater clean-up or reuse – in developing countries. Several **engineering firms**, associated within *SYNTEC-Ingénierie* (www.syntec-ingenierie.fr), participate in project design and implementation. Many **materials** are sold by technological firms of the *Union des Industries de l'Eau* (www.eau-entreprises.org). Various worldwide experts in **water treatment** design and build turnkey facilities in Africa, Asia and Latin America. Several **private operators**, including some of the sector's global leaders, manage sanitation and wastewater reuse systems on behalf of public authorities (www.fp2e.org).
A number of French **banks** also provide funding for sanitation projects in developing countries.

5.2.6. Research

Scientific cooperation in the sanitation sector is dispersed among the human and social sciences on one hand, and the water, engineering and even health sciences on the other. The former deal mainly with the cultural and social aspects of sanitation (socio-anthropology[21]) and sanitation as a municipal service (urban development, public management, economics). The latter are chiefly engaged in water purification and treatment techniques, often in relation to wastewater recycling. Cooperation involves universities, public technical and scientific establishments as well as many research units from research centers such as CNRS (National Center for Scientific Research), IRD (Institute of Research for Development) and CIRAD (Agricultural Research for Developing Countries).

5.2.7. The French Water Partnership (FWP) and shared messages

All of these players joined forces during the 2006 World Water Forum in Mexico City, forming the French Water Partnership, which was formalized in 2007. The "Sanitation" group drew up the messages that the various categories of players wished to bear together. The FWP is a platform enabling civil society and local government to be involved in the international

[20] *Guide de la coopération décentralisée pour l'eau potable et l'assainissement*, Water Solidarity program / National Commission on Decentralized Cooperation, March 2007.

[21] See summary report and thematic notes from the Water Solidarity program / Municipal Development Partnership entitled "*Sustainable management of waste and urban sanitation*" (2004) funded by MAEE.

bodies and meetings. It also enables the spreading of shared messages. The present SOD is based on these efforts and consolidates or renews these messages, adapting them to new developments, in preparation for upcoming world forums (www.partenariat-francais-eau.fr).

5.3. European and international collaboration

Bilateral cooperation in France's sanitation sub-sector must include continued support to the various regional processes, and greater participation in multilateral initiatives, through financial contributions and an influential positioning strategy within the global debate.

- France will continue to **promote and communicate about sanitation issues** during international debates concerning this sector, beginning in 2008, the International Year of Sanitation, and throughout the "Water for Life" decade from 2005 to 2015. This promotional work also implies involvement in efforts by networks, platforms and international organizations concerned by sanitation, such as the Water and Sanitation Program administered by the World Bank, the World Water Council, the UN Water network and, in particular, the Joint Monitoring Program and the OECD's water program[22].
- France's action is firmly embedded in the **European framework**, particularly through its active participation in the Africa working group of the EU Water Initiative[23]; support from AFD and MAEE to the **EU-ACP Facility for Water** (9th EDF), which placed focus on the need to integrate water and sanitation into projects; contributions to the Euro-Mediterranean partnership; and support to the EU-Africa partnership for infrastructures.
- With a view to achieving the MDGs and in collaboration with the other bi- and multi-lateral stakeholders[24], since 2005 France has supported an initiative to **monitor and assess** progress in terms of access to and management of sanitation services within beneficiary countries. This effort entails reinforcing national monitoring and assessment systems that can contribute to regional observation initiatives, which in turn contribute to a global observation system.
- French cooperation in the sanitation sector must also be based on **regional networks and processes** to accelerate awareness-building of the need to make sanitation a priority among players in the water sector and related sectors, including health and environment in particular. This includes networks of: institutions, local government, NGOs, water professionals and basin organizations.

[22] OECD DAC, "Water at a glance", published in November 2008; in association with the feasibility study on the modification of the DAC's CRS codes.

[23] Cartography of European aid to Africa in the water and sanitation sectors, and Africa-EU Statement on Sanitation, produced by the Africa working group of the EU Water Initiative in 2008 (www.euwi.net), in association with the Global Report Assessment prepared by UN Water.

[24] Collaboration with the Joint Monitoring Program (OMS/UNICEF) to harmonize result and impact indicators in the sectors of access to drinking water and sanitation.

References:

This Strategic Orientation Document owes very much to a research- and action-based program conducted between 2000 and 2004 on **Sustainable management of waste and sanitation**, financed by MAEE and led by the Water Solidarity program and the Municipal Development Partnership. All reports produced by the mixed teams (North/South, researchers/operatives) are available on www.pseau.org as well as the summary of program achievements and the contributions of the scientific committee.